maintain its functional accessible reserve of the tissue. This particular reserve is used to restore the normal apatite crystal lattice during the bone remodeling processes and the processes of recovery of bone mineral composition in various pathological conditions.

Key words: Osteoporosis, liver diseases, experimental secondary liver osteoporosis, mineral elements

24. CARDIAC SHOCK-WAVE THERAPY. A NEW METHOD OF THERAPEUTIC REVASCULARISATION OF THE HEART

Obukhovskyi Denys, Kuznetsova I.V., Savytskyy V.I., Ermilova O.A.

Academic adviser: **Savytskyy Ivan**, M.D., Ph.D., Head of the Division of Pathophysiology; **Kuzmenko I.A.** Associate Professor, Odessa National Medical University, Ukraine

Introduction: CHD is the leading cause of death throughout the world. Over the past 10 years in Ukraine mortality rate from cardiovascular disease has been 65%, in Moldova - 57%, when in the world ~ 30%. Despite a large variety of medicines to achieve long-term therapeutic results these are obtained in only a few cases. Unlike from the traditional methods of treatment, shock wave therapy has several advantages, which will be discussed in this work.

Purpose and Objectives: The aim of this research was the study of innovative, safe and effective treatment of CHD - SWT. The study of method myocardial regeneration, angiogenesis, stem cell transplantation into the myocardium to patients with myocardial infarction.

Materials and methods: SWT method has long been used in urology and orthopedics. In case of using in cardiology, acoustic wave energy is less than ~ 10 times, which ensures the safety of the method. In this work I used the experimental data modeling of biological models and clinical studies of patients' activated in the regional cardiac surgery center "of the city of Odessa. Statistical processing of data were carried out using Student t-test.

Results: SWT is based on mechanical stress in focus zone by transmitting an acoustic wave energy. The result of the acoustic wave is growth the amount of mRNA which encodes the NO-synthase (eNOS), leading to vasodilatation and better circulation. It was also found that improvement of blood flow in the capillaries entails release vascular endothelial growth factor (VEGF), increase of flow circulating stem cells into the ischemic zone, and increase the number of new capillaries. As a result, on the periphery of destruction – there is observed cellular hypertrophy of cardiomyocytes. In the area of ischemia is observed replacement of myocardial tissue by connective tissue with atypical architectonic microvasculature due to angiogenesis.

SWT application results became:

1) Reduction of the functional class of angina
2) Reduction of usefulness of nitrate
3) Growth of tolerance to load
4) Improvement of myocardial perfusion SPECT in this
5) Improvement of LV function according to echocardiography

Conclusion: Results of experimental and clinical studies allow characterizing SWT as a safe and highly effective method in treatment in patients with coronary artery disease.

Keywords: shock-wave therapy, coronary artery disease, angiogenesis

25. DECISION OF THE EUROPEAN COURT OF HUMAN RIGHTS IN THE HEALTH SECTOR IN THE CONTEXT OF UKRAINIAN LEGISLATION

Pavljuk Natalija

Academic adviser: **Verlan-Kulshenko Olena,** deputy head of the medical law, Department of Anatomical pathology, Forensic pathology and Medical law, National Pirogov Memorial Medical University, Vinnytsya

Introduction: The political section of the Ukraine–European Union Association Agreement (a treaty between the European Union and Ukraine that establishes a political association between the two parties) was signed on 21 March 2014. Thus, the Association Agreement should be applied

by national courts, as well as national legislation. At the same time, International law should be used if this law contradicts core elements of the national legislation, according to the principle of the primacy of International law.

Purpose and Objectives: Review the progress of implementation and convergence of Ukraine's legislation with the current European legislation in the context of the European Court of Human Rights judgments in Healthcare arising with non-compliance and conflicts between domestic and European law.

Materials and Methods: Were analyzed certain articles of the Constitution of Ukraine, of the Convention for the Protection of Human Rights and Fundamental Freedoms; Law of Ukraine "On the implementation of the decisions and practices of the European Court of Human Rights", the Decree of the President of Ukraine "On Approval of the Strategy for Ukraine's integration into the European Union."

Results: According to the Constitution of Ukraine, the Law of Ukraine "On International Treaties and Agreements", international treaty ratified by the Verkhovna Rada of Ukraine is part of the national legislation of Ukraine.

However at the end of 2012 Ukraine was on a fifth place after an amount of the given lawsuits in the European court (complaints about Ukraine - 10 400 - represented 7.5% of the total number of cases to the European Court). The main reason for complaints was the exhaustion of domestic remedies, due to inconsistency and conflict between domestic and European law.

In the practice of the European Court in the cases against Ukraine these issues discussed in the following areas:

1) Violation of the right to protection from torture and cruel and degrading treatment.

2) Violation of the right to liberty and security of person on admission to psychiatric institutions.

3) Violation of the right to fair justice.

Conclusion: Before Ukraine stands an urgent task to improve the legal base in the field of health protection, to bring it to conformity with the requirements of International law, to reform the entire health care system, taking into account the fundamental principles of the international legal instruments on human rights, global politics and tendencies in health care, but adapting them to the political, economic and social realities of our lives.

Keywords: European Court, International Law and Domestic Law

26. MOLECULAR MECHANISMS IN PATHOGENESIS OF CANCEROGENESIS

Popovici Doina

Academic adviser: **Todiraş Stela**, Ph.D., A.P., Medical and Pharmaceutical State University „Nicolae Testimiteanu", Chisinau, Republic of Moldova

Introduction: The study of molecular mechanisms in the pathogenesis of cancerogenesis is caused by the fact that at this stage,the fight against cancerogenic pathologies has insufficient means of prevention, diagnosis and treatment.We still hope that in future the tumors could be explained,controled and treated.

Purpose and objectives: To provide an overview of the bibliography of Molecular Mechanisms in cancer's pathophysiology, which will serve as a point of initiation in the prophylaxis and treatment of maligne tumors.In achieving our goal, we have to:

1.explore the role of genes responsible for carcinogenesis;

2.find out the role of growth factors and cellular proliferation in carcinogenesis;

3.discover the role of apoptosis in carcinogenesis;

Materials and methods: The basis of the research was a bibliographic review of the main work, which reveals the pathogenesis of carcinogenesis. The sources we used are: textbooks, monographs, handbooks, aplied publications, standards, patents, reports, theses, statistical freports, indexesand summary documentation. The stages of study were:

1.Introduction in the topic of the research;